IN THE CLAIMS:

Please amend the claims as follows:

1. (Currently Amended) A method for speech recognition, comprising the steps of:

generating a set of likely hypotheses in recognizing speech;

rescoring the likely hypotheses by using semantic content and lexical content by employing a semantic structured language models which combines a semantic language model and a lexical language model; and

scoring parse trees to identify a best sentence according to the sentences' parse tree by employing the semantic structured language models semantic information and lexical information in the parse tree to clarify the recognized speech.

2. (Original) The method as recited in claim 1, further comprising the step of training a language model using speech recognition methods.

3. (Original) The method as recited in claim 1, wherein the set of likely hypotheses is in the form of an N-best list or lattice.

4. (Currently Amended) The method as recited in claim 1, wherein the step of rescoring employs maximum entropy method 2 (MELM2) or maximum entropy method 3 (MELM3) semantic structured language models.

5. (Currently Amended) The method as recited in claim 1, wherein the step of scoring parse trees to identify a best sentence according to the sentence's parse tree ~~by employing the semantic structured language models to clarify the recognized speech~~ includes the step of training the structured semantic language models in accordance with history parameters and history questions.

6. (Original) The method as recited in claim 5, wherein the history parameters include a previous word (wj-1), a previous word of the previous word (wj-2), a parent constituent label (L), a number of tokens (N) to the left since L starts, a previous closed constituent label (O), a number of tokens (M) to the left after O finishes, and a grandparent label (G).

7. (Original) The method as recited in claim 5, wherein the history questions include a default, (wj-1), (wj-1, wj-2), (L,N), (O,M), and (L,G).

8. (Original) The method as recited in claim 1, further comprising the step of determining a confidence measurement.

9. (Original) The method as recited in claim 8, wherein the step of determining a confidence measurement includes employing a statistical method to combine word sequences with a parser tree to determine a confidence score for recognized speech.

10. (Currently Amended) The method as recited in claim 8, wherein the step of determining a confidence measurement includes employing scores obtained from the semantic structured language models along with other speech recognition based features.

11. (Original) The method as recited in claim 1, further comprising the step of extracting probabilities assigned to tags, labels and extensions obtained from a parser tree.

12. (Currently Amended) The method as recited in claim 11, further comprising the step of combining the semantic structured language models and speech recognition based features with the extracted probabilities using a classifier.

13. (Currently Amended) The method as recited in claim 1, wherein the semantic structured language models are trained by employing unigram, bigram and trigram features.

14. (Currently Amended) The method as recited in claim 1, wherein the semantic structured language models are trained using one or more of relative labels, token numbers, and answers to questions related to word order or placement.

15. (Currently Amended) The method as recited in claim 1, wherein the semantic structured language models are is trained by including a unigram feature, a bigram feature, a trigram feature, a current active parent label (Li), a number of tokens (Ni) to the left since current parent label (Li)

starts, a previous closed constituent label (Oi), a number of tokens (Mi) to the left after the previous closed constituent label finishes, and a number of questions to classify parser tree entries.

16. (Original) The method as recited in claim 15, wherein the questions include a default, (wj-1), (wj-1, wj-2), (Li), (Li, Ni), (Li, Ni, wj-1), and (Oi, Mi), where w represents a word and j is and index representing word position.

17. (Original) A program storage device readable by machine, tangibly embodying a program of instructions executable by the machine to perform method steps for speech recognition, in accordance with claim 1.

18. (Currently Amended) A method for speech recognition, comprising the steps of:

generating a set of likely hypotheses in recognizing speech;

rescoring the likely hypotheses by using semantic content and lexical content by employing a semantic structured language models which combines a semantic language model and a lexical language model;

scoring parse trees to identify a best sentence according to the sentence's parse tree by employing the semantic structured language models semantic information and lexical information in the parse tree to clarify the recognized speech; and

determining a confidence measurement by employing scores obtained from the semantic structured language models along with other speech recognition based features.

19. (Original) The method as recited in claim 18, wherein the set of likely hypotheses is in the form of an N-best list or lattice.

20. (Currently Amended) The method as recited in claim 18, wherein the step of rescoring employs <u>maximum entropy method 2 (MELM2)</u> or <u>maximum entropy method 3 (MELM3)</u> semantic structured language models.

21. (Currently Amended) The method as recited in claim 18, wherein the step of scoring parse trees to identify a best sentence according to the sentence's parse tree ~~by employing the semantic structured language models to clarify the recognized speech~~ includes the step of training the semantic structured language models in accordance with history parameters and history questions.

22. (Original) The method as recited in claim 21, wherein the history parameters include a previous word (wj-1), a previous word of the previous word (wj-2), a parent constituent label (L), a number of tokens (N) to the left since L starts, a previous closed constituent label (O), a number of tokens (M) to the left after O finishes, and a grandparent label (G).

23. (Original) The method as recited in claim 21, wherein the history questions include a default, (wj-1), (wj-1, wj-2), (L,N), (O,M), and (L,G).

24. (Original) The method as recited in claim 18, further comprising the step of extracting probabilities assigned to tags, labels and extensions obtained from a parser tree.

25. (Currently Amended) The method as recited in claim 24, further comprising the step of combining the semantic structured language models and speech recognition based features with the extracted probabilities ~~using a classifier~~.

26. (Currently Amended) The method as recited in claim 18, wherein the semantic structured language models are trained by employing unigram, bigram and trigram features.

27. (Currently Amended) The method as recited in claim 18, wherein the semantic structured language models are trained using one or more of relative labels, token numbers, and answers to questions related to word order or placement.

28. (Currently Amended) The method as recited in claim 18, wherein the semantic structured language models ~~are~~ is trained by including a unigram feature, a bigram feature, a trigram feature, a current active parent label (Li), a number of tokens (Ni) to the left since current parent label (Li) starts, a previous closed constituent label (Oi), a number of tokens (Mi) to the left after the previous closed constituent label finishes, and a number of questions to classify parser tree entries.

29. (Original) The method as recited in claim 28, wherein the questions include a default, (wj-1), (wj-1, wj-2), (Li), (Li, Ni), (Li, Ni, wj-1), and (Oi, Mi), where w represents a word and j is and index representing word position.

30. (Original) A program storage device readable by machine, tangibly embodying a program of instructions executable by the machine to perform method steps for speech recognition, in accordance with claim 18.

31. (Currently Amended) A system for speech recognition, comprising:

a unified language model including a semantic language model and a lexical language model;

a recognition engine ~~which~~ configured to finds a parse tree to analyze a word group using the lexical model and the semantic models, the parse tree including both lexical information and semantic information wherein the parse tree is selected based on the lexical information and the semantic information which considers tags, labels, and extensions to recognize speech.

32. (Original) The system as recited in claim 31, wherein the parser tree includes semantic information and classer information used in identifying a best parser tree for a given word group.

33. (Original) The system as recited in claim 31, wherein the parser tree includes

information extracted from parsed sentences to statistically model semantic and lexical content of sentences.

34. (Original) The system as recited in claim 31, wherein the semantic language model includes unigram, bigram and trigram features.

35. (Original) The system as recited in claim 31, wherein the semantic language model includes one or more of relative labels, token numbers, and answers to questions related to word order or placement.

36. (Original) The system as recited in claim 31, wherein the semantic model is trained by including a unigram feature, a bigram feature, a trigram feature, a current active parent label (Li), a number of tokens (Ni) to the left since current parent label (Li) starts, a previous closed constituent label (Oi), a number of tokens (Mi) to the left after the previous closed constituent label finishes, and a number of questions to classify parse tree entries.

37. (Original) The system as recited in claim 36, wherein the questions include a default, (wj-1), (wj-1, wj-2), (Li), (Li, Ni), (Li, Ni, wj-1), and (Oi, Mi), where w represents a word and j is and index representing word position.

38. (Original) The system as recited in claim 31, wherein the semantic model is trained by including history parameters and history questions.

39. (Original) The system as recited in claim 38 wherein the history parameters include a previous word (w_{j-1}), a previous word of the previous word (w_{j-2}), a parent constituent label (L), a number of tokens (N) to the left since L starts, a previous closed constituent label (O), a number of tokens (M) to the left after O finishes, and a grandparent label (G).

40. (Original) The system as recited in claim 39, wherein the history questions include a default, (w_{j-1}), (w_{j-1}, w_{j-2}), (L,N), (O,M), and (L,G).

41. (Original) The system as recited in claim 31, further comprising a confidence measurement module.

42. (Original) The system as recited in claim 31, wherein the confidence measurement module employs a statistical method to combine word sequences with the parse tree to determine a confidence score for recognized speech.

43. (Original) The system as recited in claim 31, wherein the confidence measurement module extracts probabilities assigned to tag nodes, label nodes and extensions in the parse tree.